DOCUMENT RESUME

ED 200 720 CE 028 397

TITLE	Adult Learning and the American Worker. The Report of the National Panel on Worker Education and Training Policy.
INSTITUTION	National Inst. for Work and Learning, Washington, D.C.
SPONS AGENCY	National Inst. of Education (ED), Washington, D.C.
PUB DATE	80
CONTRACT	400-76-0125
NOTE	15p.
AVAILABLE FROM	The National Institute for Work & Learning, Suite 301, 1211 Connecticut Ave., N.W., Washington, DC 20036 ($3.00).
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Adult Education; *Adult Learning; Colleges; Communications; *Continuing Education; Economic Change; Economic Progress; *Educational Improvement; Educational Innovation; *Educational Needs; *Educational Opportunities; Industrial Training; Labor Education; Lifelong Learning; Mass Media; Needs Assessment; *Nonprofessional Personnel; Nontraditional Education; Nontraditional Students; Social Change; Training Allowances; Tuition Grants
IDENTIFIERS	United States

ABSTRACT

This report examines the need for education and training during working life, the present structure of opportunity for it, and preferred directions for the future. In the introduction are addressed the relevance of adult education to work life and the advantages of concentrating on worker education. Focus of the next section is the effect of social and economic changes on the need for a growing structure of learning opportunities during working life. The final section discusses those elements in the already developed adult education experience that constitute bases for a larger structure of learning opportunity. These include (1) the 1970s' developments in postsecondary and other educational institutions, (2) the private sector tuition aid programs, (3) the links between industry training and economic growth, and (4) the emerging application of electronic and media technology. (YLB)

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CE 028 397

ADULT LEARNING AND THE AMERICAN WORKER

The Report of the National Panel on Worker Education and Training Policy

Fall, 1980

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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The National Institute of Education
U.S. Department of Education

Has provided funding support necessary for the development
of this policy panel report under Contract Number 400-76-0125
(The Worker Education and Training Policies Project).

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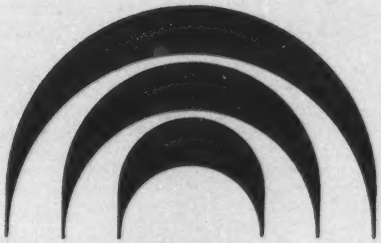

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PREFACE

Funded by the National Institute of Education (NIE), organized and convened by the National Institute for Work and Learning (NIWL), the National Panel on Worker Education and Training Policy was created to examine the need for education and training during working life, the present structure of opportunity for it, and preferred directions for the future.

During late 1979 and early 1980, most members of the panel were interviewed, either by NIWL's Chairman of the Board, President, Vice President, Project Director, or the Senior Project Consultant. These interviews formed the principal basis for preparing a first draft of a report, by NIWL staff, which was circulated to the Panel members in the winter of 1979, and formed the basis of a Panel meeting in March of 1980. A draft final report was again reviewed by the Panel in August of 1980.

This exercise in collaboration among employers, unions, educators, and government produced not complete, but substantial concensus, although some members of the Panel would place more or less emphasis on some points contained in the report. This panel is as follows:

Dr. Stephen Bailey
President
National Academy of Education

Mr. Walton E. Burdick
Assistant Group Executive
Finance and Planning
IBM Corporation

Mr. Walter Davis
Director, Community Services
AFL-CIO

Dr. John T. Dunlop
Lamont University Professor
Harvard University
Graduate School of Business Administration

Mr. Douglas Fraser
President
United Auto Workers

Mr. Steven Fuller
Vice President
General Motors Corporation

Honorable Jacob Javits
United States Senate

Mr. Vernon Jordon
President
National Urban League

Mr. Harold McGraw
Chairman
McGraw-Hill Publishing

Mr. Jack Otero
International Vice President
Brotherhood of Railway & Airline Clerks

Mr. Bayard Rustin
Chairman of the Board
A. Phillip Randolph Institute

Mr. Albert Shanker
President
American Federation of Teachers

Mr. Frank W. Schiff
Vice President and Chief Economist
Committee for Economic Development

Dr. Virginia Smith
President
Vassar College

Mr. Fred L. Turner
Chairman of the Board
McDonald's Corporation

Mr. J. C. Turner
President
International Union of Operating Engineers

Honorable Harrison A. Williams, Jr.
United States Senate

Those of us at the National Institute for Work and Learning who handled the mechanics of this exercise appreciated deeply and sincerely the opportunity to work with this group of informed executives and leaders, as we do the financial support and broader assistance of those at the National Institute of Education — particularly Michael Timpane, Mark Tucker, David Mandel, and Nevzer Stacey — who made the project possible.

Willard Wirtz
Chairman

Introduction

Although millions of American adults will take part this year in one form or another of classroom activity, "adult education"—or "lifelong learning," or "continuing education," or "recurrent education"—has not yet emerged as a major or even a clear element in national policy. There is more than usual concern about the functioning of formal education. The general assumption, however, is that whatever problems there are here will be met by strengthening and expanding the schooling people receive when they are young. Anything beyond this is considered still so putative and experimental as to have no immediate significance.

The prevailing attitude is probably mistaken in two material respects. Despite the general assumption that identifies schooling exclusively with youth, there is increasing evidence that the society and economy have entered a stage where formal education's responsibilities cannot be discharged fully or even satisfactorily if it is confined entirely to opening rounds in people's lives. A close look suggests strongly, furthermore, that there are now the makings in tested experience in this area for developing purposively and systematically what has so far been left largely to happen. Adult education is today moving more toward imperatives and away from frills, and moving beyond conception to actual experience.

This prospect is approached here on the theory that its promise is missed by looking at it too broadly. It has seemed worthwhile to emphasize the potential relevance of adult education to one particular aspect of life's broader experience: that part of it involving people's work lives and the functioning of the economy. But this is not to ignore the values of education beyond its preparation for work. Making workers, including those who seek work, the object of particular attention implies correctly a concentration on work-related education. This worklife focus need be neither a narrow nor an exclusive emphasis. Workers' education is properly perceived only as working people's more general interests and purposes are fully recognized.

This concentration on the relevance of adult education to work life offers distinct advantages. It takes account of the unquestionable fact that, regardless of its perhaps prouder boasts and larger contributions, education of all kinds has always found major motivating support and direction in its economic implications. This approach permits identifying particular sets of needs and uses and users around which any necessary systemization and institutionalization can be more effectively developed. In this same connection, such an approach affords a basis for selecting those elements in the already developed adult education experience that constitute beachheads for pushing ahead. Concentrating on worker education, on the prospects for making formal educational opportunity a more significant part of the adult work life, is the counsel not of narrow materialism, but of due regard for the dictates of effectiveness in moving toward a larger use of the human potential and the ideal of making the highest and best use of the life experience.

The Pace of Change

At some level, there has long been a need for adult learning, and none would argue otherwise. There was a time when a sizeable proportion of adults in the large cities were attending "Americanization" classes, preparing to be citizens. There are forces of change in the nation today that make the need more dangerous to ignore.

A renewed immigration requires the fitting of many adults with both workforce skills and a new language. While the economy will need to strain to absorb these populations, it will be a much more complete absorption if learning opportunity is provided. The skills acquired could cause immigration to be a boost to the economy rather than a drag on it.

The recent achievements in educational equality have been mainly in the early school and college years. This achievement is of little help to the 45 year-old black or hispanic with an eighth grade education and 20 more years to work in an economy where even the machines now have high school educations.

The social and economic upheaval of many more women entering the commercial workplace shows every sign of continuing. In the early 1950s, just over one out of three women were in the labor force. The figure is now one out of two, and could be two out of three by the 1990s. This is one of the largest scale career transitions ever made, and access to education and training for many may make the difference between successful transition and bitterness and disappointment.

The easy answer to growing older has been to retire, and retirement has come earlier as social security and pensions became available, and as early retirement options teamed up with mandatory retirement practices. That policy is leading to bankruptcy in retirement funds as older people become a larger proportion of the population, and older people are finding that the pensions they thought they could get by on will not cover essentials in these days of double digit inflation. The answer will probably have to be to extend the option of working longer. Education and training is one way to do this, by preparing people for stimulating second and third careers.

The undisputed benefits of a constantly churning and changing economy cause problems for individual workers caught up in the disappearance of jobs or their being moved from one place to another. This hits the headlines most frequently in reporting the impact of imports, but there is also the quieter and more gradual impact of technological change and the migration of industry from one region to another. Many of these workers land on their feet and many do not; when they need to switch occupations they often need to be retrained in order to do so.

As the World War II baby boom streamed from the school, bloated the unemployment rate in the 1960s, and then dispersed into the factories and stores across the Nation they became much less visible. This wave is now one of young adults with more education than any group before them. They represent a vast resource in the labor force but their very numbers will mean that their opportunities to move up in work organizations may be less than their expectations. More career mobility may have to be in terms of horizontal as well as vertical movement. Education and training are means of achieving both kinds of occupational change.

This pace of change requires a growing structure of learning opportunities during working life.

The principal "worker" constituencies then for whom adult education has particular relevance are: those that circumstance denied the ordinary measure of formal education when they were young; those facing major career changes because advancing technology has displaced them or because they

have developed new desires and purposes; women wanting the training that will make equal opportunity more than a taunting promise; those disadvantaged or handicapped either by birth's indiscriminate ironies or by society's unfairnesses, who want to earn their keep instead of having it handed out to them; seniors for whom educational and training renewal will be the difference between sterile security and continuing vitality.

In looking at the specific situations these constituencies face, there can be illumination of what has probably become — with more change taking place now during an individual's lifetime than a century used to produce — the fallacy of the conventional assumption that the formal education youth can get before they are twenty will be a valid passport for the fifty years that follow.

The principal effort here, however, is to find the usable instruction that experience offers. If adult education, or lifelong learning, is conceived of so broadly and vaguely that it covers everything from hobby horse riding to women's handling of dual career responsibilities, the architect can't know what the client wants or what materials are to be drawn on. It emerges, though, that there is already substantial guidance, from trial and both error and success, in a number of developments that can be identified as enlarging significantly the effectiveness and meaning and availability of work through the renewal of opportunity for education and training. To mark out some of these specific developments, and to suggest forms for their enlargement, will be to bring the adult education prospect into manageable focus.

Building on Experience

There is a strong temptation to proceed quickly on from these new needs for learning to deduction in logical fashion regarding new institutions and structures that should be put in place. Yet this would be almost a worse mistake than doing nothing at all. Such an approach would ignore the institutional purposes, political realities, and pluralistic character of the important and considerable developments of the last two decades — and earlier.

While the task may seem harder and even somewhat pedestrian, there will be much greater accomplishment in sorting through recent experience for the strands with which we can tie together a larger structure of learning opportunity. We believe these strands are to be found (i) in the 1970s developments in postsecondary and other educational institutions, (ii) in the private sector tuition aid programs, (iii) in the links between industry training and economic growth, and (iv) in the emerging application of electronic and media technology.

1. Doing More Better

One substantial experience on which to enlarge learning opportunity is the broad base of growth in public schools, community colleges, vocational and technical institutes, and proprietary schools, lowered barriers to adults in four-year institutions, weekend colleges, off-campus learning centers, open universities, CLEP examinations, academic credit for life experiences, libraries, and a variety of new nontraditional programs for nontraditional students. There are also education and training opportunities for adults at union halls, in employer classrooms, professional organizations, community-based organizations (such as YMCAs, YWCAs, Opportunities Industrialization Centers, and churches), CETA Prime Sponsors and Private Industry Councils, military organizations, correspondence schools, organized instruction over home television, and agricultural extension services.

These are diverse sources, and there is nothing neat and orderly about the system. But the needs of the populations we have been talking about are also diverse. *These needs are most likely to be met by building on what we have, and the connections people now accept as comfortable.*

This view does not spring from a desire to encourage chaos. It's just that it's too soon to see a clearly preferred pattern into which the learning needs can be fit. *But we do encourage much more serious attention to tracking the patterns which are emerging and watching for the best fit between what people need and what they are being offered.*

One pattern that is emerging is that those who had the least education when they were young are taking least advantage of learning opportunity when they are older. *We should make sure that more barriers are not being erected that limit access of the least educated, and of minority populations.*

This diversity in the structure of opportunity also means that choice is wider, and information about what exists harder to come by. *We have to become systematic about providing educational counseling services for adults.*

Building on the development of the 1970s, however, does not mean simply accepting what has been put into place. *Educational institutions still often treat adults as second-class students. Bilingual instruction is still in short supply. Financial aid programs, such as Basic Educational Opportunity Grants, discriminate against the part-time student and particularly the adult learner. Postsecondary education institutions often don't listen to what working people have to say about what they want to study.*

The rush to serve adults, and most particularly the rush to make up for declining enrollments of

youth, creates temptations to offer poor quality instruction, and engage in practices that come too close to the outright selling of degrees. Mixed in with the growth in quality programs in nontraditional approaches have been a few traditional rip-offs that make respectable educators blush. *We urge the system of academic assessment and accreditation to increase its vigil in this decade of declining youth enrollments, and therefore declining revenues to educational institutions.* That traditional system of maintaining standards is on trial to see if it can do in the adult area, where practice is increasingly diverse, what it has been doing satisfactorily with regard to education of youth.

In the decade of the 1980s there is growing need for learning during working life, but the gains need to be solid, and not achieved by lowering quality.

2. Realizing the Tuition Aid Promise

Another well established beachhead of experience in enlarging options for the education and training of workers is the growing availability in industry of arrangements whereby employers will pay the tuition (and sometimes related) costs of going to school part-time. About 85 percent of firms with 500 or more workers have these arrangements, and there are now about 200 collective bargaining agreements that provide for tuition-aid.

This approach for enlarging opportunities has promise because there is now considerable experience with it, and because there is increasingly wide agreement on the soundness of the practice, a fact recently disclosed by a survey of employers, unions, and workers.* The study found large agreement between unions and employers that worker education provided in this way was important in terms of job performance, updating knowledge, and job mobility. While workers were more likely to stress the achievement of personal goals through tuition aid, they also assign importance to reaching career objectives through it.

What has been learned, however, is that the rates of participation in tuition-aid plans are surprisingly low, from three to five percent for all workers, and considerably less than that for blue collar workers. Yet tuition aid has considerable potential for:

— Meeting employer's needs for increasing the abilities of workers, through use of the whole community's education and training institutions
— Meeting standing objectives of unions in broadening opportunities for worker education . . . for community life, citizenship, and liberal learning
— Enabling workers to learn while they earn
— Enabling education institutions to serve adults by providing a source of private funding for education and training.

On the one hand, there is a growing availability of tuition aid. On the other hand there is the growing capability of the education community to serve adults, due to: the rapid growth of community colleges, the new emphasis on serving adults in vocational and technical institutions, the availability of proprietary schools, and the lowering of barriers generally in postsecondary education through new "nontraditional" programs to reach "nontraditional" students. *These two developments have been largely running on separate tracks, and a whole lot more could be accomplished if they were to pull together.*

Among the attributes of tuition-aid are flexibility in meeting employer and worker needs, the diversity of courses that can be taken by letting the worker pick among the available educational institutions, and the market discipline

*The survey was carried out by the National Institute for Work and Learning. *See An Untapped Resource*, by Ivan Charner, *et al*, 1978.

involved in the necessity of the educational institution to compete for clients. Therefore, there is no virtue in trying to enlarge tuition-aid use through forcing uniform approaches. *However, there are possibilities that merit careful exploration.*

One would be for employers to review those features of tuition-aid plans that inhibit participation, such as reimbursing workers after completion, instead of advancing or loaning the money at the beginning of the course, and reviewing requirements that the courses be narrowly related to the current job, rather than any job in the firm or permitting courses that enlarge a worker's horizons or prospects.

Another would be for employers and unions to place better information in the hands of workers about the availability of tuition aid and how they can take advantage of it (about half of those surveyed don't know they are eligible for it) and to provide educational guidance to help workers make choices and deal with educational institutions.

Yet another would be for employers, unions, and educators in the community to get together in order

- *for education institutions to become aware of this source of funding (they aren't now);*
- *for education institutions to become better aware of what workers, employers, and unions need and want; and*
- *for employers to become better aware of what education institutions have to offer.*

Tuition-aid is heavily a private sector initiative, and one with considerable promise of enlarging learning opportunities. It is well worth the attention of those private decision-makers who will determine its future.

3. Training and the Economy

One reason we expand education and training options for workers is to improve their well being and happiness. The other is that the Nation's industrial machinery is dependent on a sufficiently educated and skilled workforce. Fortunately, the choices and aspirations of individual employees very often coincide with demands of production schedules. The responsibility for training workers, after they enter employment, rests in the United States solely in the private sector; in some industries employers and unions share that responsibility.

The level and intensity of industrial training varies with the industry, and with the size of the firm. Large firms train more than small ones, and high technology industries train more than low ones. The variation is immense, and few generalizations apply, except that individual firms (individually or jointly with unions) make their decisions, and government is very little involved (except in the case of training costs in hiring disadvantaged workers under the Comprehensive Employment and Training Program, particularly through the new Private Industry Councils).

The level of private investment in training within industry (in terms of dollars or individuals) is not measured through any standardized statistical program, nor are there complete records in individual corporations. It is therefore a matter for pure speculation as to whether the investment in human resource development is sufficient. We measure investment in plant and equipment, but not in the training of people. The question was not perhaps as critical in times past as it is today.

As the Nation enters the 1980s it carries into the decade some serious economic problems. Inflation remains at unacceptable levels. Our products are less competitive in world markets. And underlying both these conditions is a serious decline in productivity. While no one can pinpoint all the reasons for this decline, productivity measurement experts in their historical

studies have attributed significant roles to education and training.

While there is common sense to the proposition that adequate investments in training will affect productivity, there are no systematic studies at the level of the plant or enterprise that measure what effect such investments do have on output. It is a serious handicap for a Nation beset by so many tenacious economic problems to be in the dark about its human capital investments. *Two efforts are needed now:*

—*Regular measurement of private industry investment (dollars and people) in education and training, including on-the-job training, which is the predominant mode.*
—*Plant level intensive case studies to identify the results of different levels of investment in education and training on productivity.*

When we know something about it we can start to fashion policies to affect the level of investment.

At the same time, however, *it would be prudent to explore alternatives for influencing the level of industry spending for human resources development.* A number of developed countries have been much more attentive to this investment than we have, and various forms of industry-government cooperation are being used to increase such investment. The Industry Training Boards in the England are one example. The French system of employer levies and paid education leave is another.

The United States now provides an investment tax credit, but it is limited to plant and equipment. Should there be a comparable credit for investment in human resources? We have "depreciation" allowances. Should there be allowances for skill "appreciation?" Is the incentive approach a proper relationship between government and industry in

this area? These questions merit intense consideration as the Nation struggles with economic adversity.

In addition to the relationship between incentives and levels of investment, there is also need to explore cooperative ventures between industry and higher education to provide skills, such as in the successful TAT project in Oak Ridge, Tennessee.

4. Learning and Technology

Today a single silicon chip can store 10,000 words. One prediction is that by the end of the 1980s one chip will store a whole set of books. A combination of a new stage of computer technology, communications satellites, and video cassettes and discs gives prospect of new opportunities in education generally, and in adult education and training specifically.

There has been insufficient awareness of how fast the technology is developing in an area that has application to delivery of educational services. Christopher Evans has written, in a book called *The Micro Millennium*, that "if the efficiency and cheapness of the car had improved at the same rate as the computer's over the last two decades, a Rolls Royce would cost about $3.00 and would get three million miles to the gallon." *The opportunities in education from this fast pace of developments will not be realized unless there is careful and thoughtful attention to both the promise and the problems.*

The last time new technology was touted as a better way in education, the opportunity was missed because of serious mistakes. In fact, the first wave of technology was rejected by the education profession because of promoters and hucksters who spoke of the equipment as being "teacher proof," as being substitutes for teachers rather than as assistance to them. Billions of dollars were wasted because teachers were not engaged at the outset.

There is beginning to be some experience with and careful work on the use of the new communications technologies in the adult area and we do not mean that the landscape is barren. For example, there is the Kentucky Educational Television effort to prepare adults to take the GED exam, being broadcast in 40 states by over 400 institutions. In Illinois alone, it is broadcast by 35 community colleges and its library system. In Toledo, Ohio, the City Venture Company is using a system of computer-assisted instruction called Plato, developed by Control Data Corporation, to teach basic English and math to disadvantaged youth, and in St. Paul, Minnesota to help train fledging entrepreneurs. And the West Central Illinois Educational Telecommunications Corporation is a consortium of community licensed television stations and education institutions that is arranging production and distribution systems employing television, radio, common carrier microwave, cable TV, and videocassette systems.

In general, however, this wave of technology is about to wash over the educational community, dashing hopes of broadening educational opportunity because of a lack of appreciation for what can be done with it, and a lack of fit between the educational content and new means of delivering it. The opportunities waiting to be realized come from:

—The potential to narrow gaps in educational attainment between urban and rural areas. It is very hard to reach adults scattered over large geographical areas by bringing them all to the classroom.

—The comfort many adults will feel from being able to study at home, for example, with video disc instruction, compared to going to classrooms where they may have experienced failure.

—The extension of opportunity that will result from the low costs of home based instruction.

—Possibilities of educational in-

stitutions reaching workers at the workplace and union hall.

But realizing these opportunities will not come easily or cheaply. There are barriers to hurdle, and mistakes to be avoided.

—The investment in content is as important as the investment in hardware to deliver it. There is more fascination with how many words can be stored on a silicon chip than with what those words ought to be.

—We must not widen educational gaps by using television to provide poorer people with "juke box" education while those with higher incomes get it on the college campus.

—We must not forget that to be successful, mass communications systems must have some support centers that provide individual guidance when it is needed. For example, England's Open University has 284 Study Centers, all of them equipped with both direct reception and tape recording of both radio and TV media, as well as having tutors and counselors available for personal interviews.

It seems a reasonable charge on leaders of education, from the Secretary of Education to chief state school officers, to the American Council on Education, to directors of continuing education, to individual college and university presidents, to take extremely seriously the possibilities of the new technology in expanding access to education and training opportunities, and harness it for the delivery of quality education. The developers and promoters of the new technology must do what is necessary to make the educational content as good as the electronics through which it is transmitted. Bad teaching will be spotted no matter how many words can be placed on the head of a silicon chip.

5. Fitting Pieces Together

The value of the diverse approach to enlarging learning opportunities, and the encouragement of developments in the private sector ... on a decentralized decision-making basis ... will be lost if institutional separatism continues to rule. All the pieces won't fit themselves together; some institutions that have not been on speaking terms are going to have to get to know each other.

This need for links between educational suppliers and other institutions exists in youth learning as well as in the case of adults. But the need is even greater where adults are involved. For one thing, adults must straddle the institutions of work and those of education, as long as we do not provide for year-long education breaks or sabbaticals as in France and Germany. For another, the desire for a link between adult education and training and occupational progression is a strong element in adult motivation, although the pursuit of learning for personal fulfillment is also strong.

There is a good deal of improvement that can be achieved through forging links among institutions and organizations.

There is the need for employers to work with education institutions to see what their capabilities are, and use those capabilities where it is more cost effective than duplicating them.

There is the need for education decision-makers to get out of their school buildings and talk to workers and unions about what kind of learning opportunity is really wanted. For years unions have charged that postsecondary education isn't doing this.

To make tuition aid programs work there is a necessity of collaboration among employers, unions (where applicable) and educators in order (i) to get accurate information to workers (ii) to get the right courses offered, (iii), to get barriers to participation removed, and (iv) to match worker aspirations with learning opportunities.

There is a need for education institutions to be in enough communication with employment institutions that the occupational training they provide is realistically attuned to hiring requirements, and to work out agreements for using real work settings for skill training.

There is a need, in public efforts to help disadvantaged adults under the Comprehensive Employment and Training Act, for CETA Prime Sponsors to have cooperative relationships with employers, unions and educators using such mechanisms as the Private Industry Councils. While existing efforts are in the right direction, there is a need to go further in moving more of this training into the private sector, and link public classroom training with skill needs in the economy.

It is such collaborative efforts as these that will make the difference in creating enlarged opportunity through building on past experience while maintaining diversity and decentralized decision-making.

* * *

This Panel commends for consideration in corporate board rooms, union halls, academe, and government executive offices and legislatures, the following:

—Recognition of forces stemming from demographic, economic, and social change that command enlarged attention to adult and worklife learning

—Enlargement of such learning by building on past experience

- *of growing receptivity to adults in educational institutions in the 1970s... but paying careful attention to quality and standards*
- *through realizing the promise in the growth of tuition-aid programs in the private sector*
- *of industry investment in skill training, with closer attention to levels of investment that will spur productivity and economic growth, and*
- *with mistakes in harnessing the first wave of new communications technology, and realizing the potential of the micro computer, communications satellites, and the video cassette and disc*

—Fitting together the diverse pieces in the mosaic of learning opportunity through closer links among employers, unions, education institutions, and government, particularly at the local level.

These actions would represent a guided evolution based on experience, and not a revolution and enormous expense.